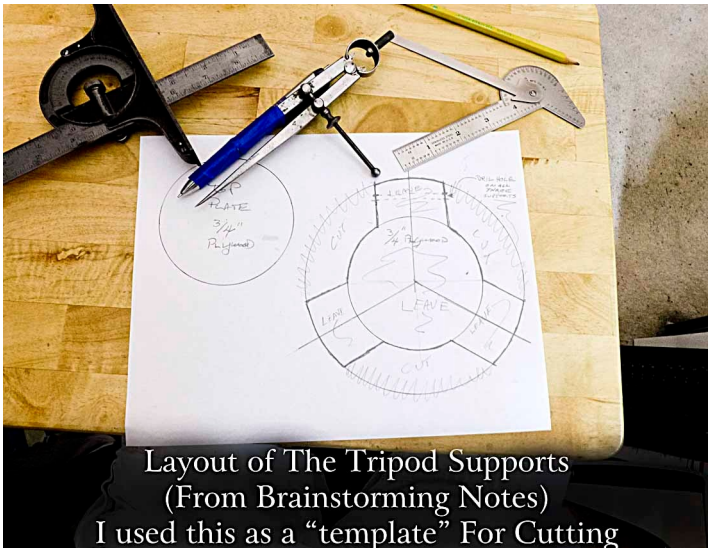
Making a Wooden Tripod For A Large Format Camera

(*Straight Leg - Non-Adjustable*)

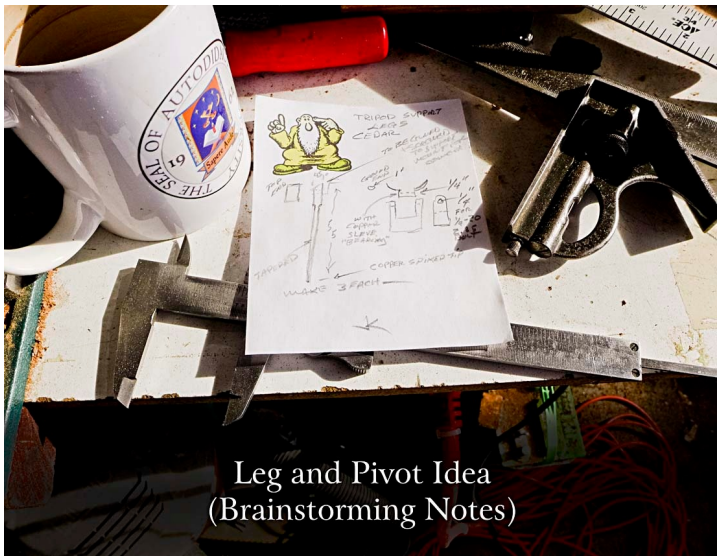
The making of a non-adjustable tripod is easier than one might think. I know, the adjustable leg types are convenient, and make packing and carrying them much easier. However - The non-adjustable leg design is more ridged and easier to build.

For this DIY project, I used cedar 2X4's that I could taper and the wood is light in weight. The “platform” (*where the camera would mount*) I selected plywood because of it’s strength and durability. The hardware to hold the legs onto the platform was 1/4" 20 tpi (*Treads Per Inch*) “hex-bolts” and hex-nuts, with flat washers. Also - I choose to use 1/4" copper tubing for a “sleeve-bearing surface” in the holes drilled into the legs supports, for less wearing of the wood joints, and non-wobble fit. These pivot and allow the spreading of the legs, and thus, the camera can be used at full height and as low as waist high.

First things First -



Layout of The Tripod Supports
(From Brainstorming Notes)
I used this as a “template” For Cutting



Leg and Pivot Idea
(Brainstorming Notes)

I drew out a “one to one scale” drawing that would be used as a template for the cutting of the camera mount, with a 3/4" riser for the use of mounting a “Gear-Head” on the mount. After finding the correct degrees of spread that would be equal for each of the three independent legs, I drew rough plans for a pivot support for the platform and the legs. (I call these rough sketches - “*brainstorming*” drawings.) I measured the height that I normally use for my “Paul Ries tripod”, which was 55 inches. I found what I needed in the way of wood from my scrap pile (*saved from a “yard fence” that was dismantled*). Measured and cut to the correct measured length. Also cut the pivot supports and drilled holes for the pivot points.

Next.... I cut the plywood support, and platform, along with the pivot leg supports and copper “sleeve” bearing parts. Put them together with the Gear Head for seeing that all was good with the fits. After that completed, I concentrated on the cutting of the cedar 2X4's and working them into a tapered shape.

Leg Pivot Part
(Make Three Each)

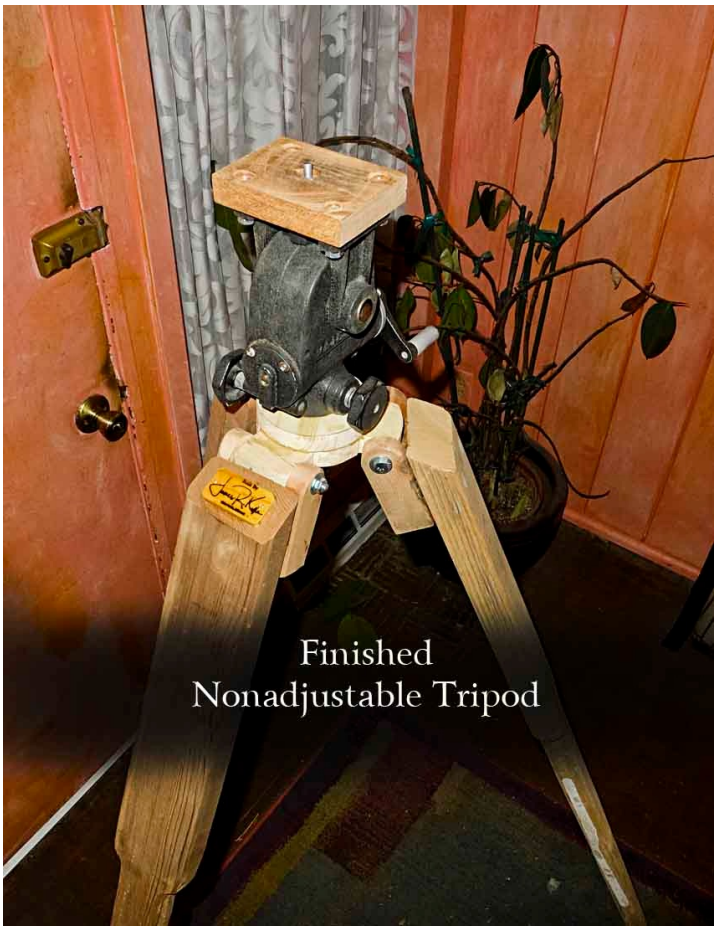
Tripod Head Mounting With Pivots
And Three-Point Leg Mountings

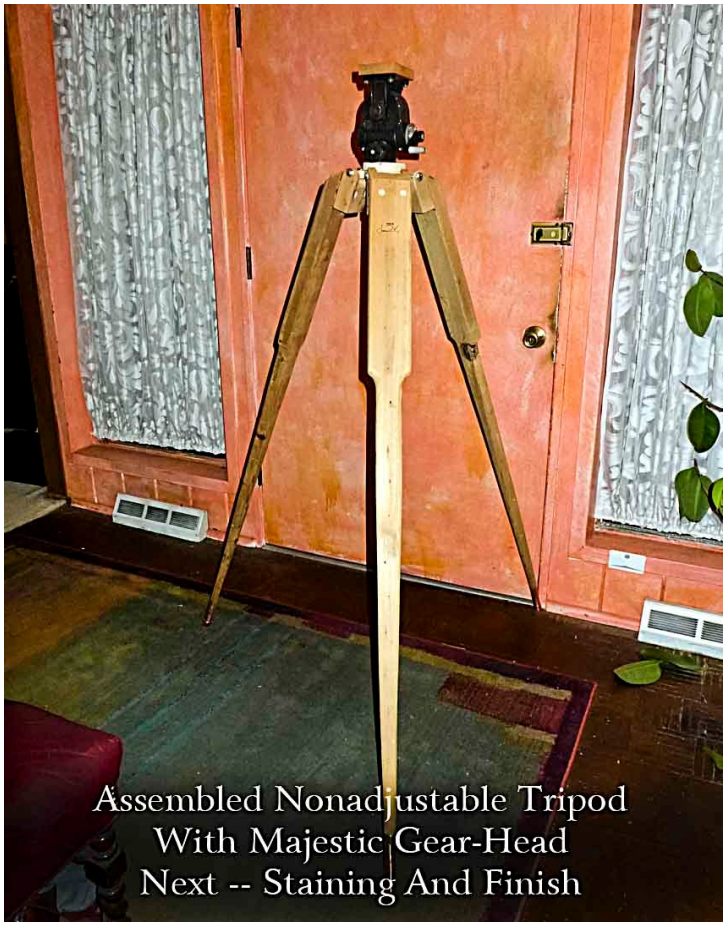
I would finish smoothing out these parts later before painting.

Showing the Different Stages of Making
The Leg Supports from 2X4 Cedar Wood

All in all this sort of project is very straight forward. You select the items you need and cut and shape them according to what you see in your "mind's eye". I only used the "Brainstorming" drawings to show others in this [PDF] how I saw it. This is by far as easy as building a box with a hinged lid. By shaping the legs I used a "spoke shave" (*it is like a wood bench plane, however much smaller and has two handles on opposite ends - also referred to as a "draw-knife".*) The tapered support legs have each a four inch copper pipe at the "ground-end" I gaged the taper to a little over 3/4 of an inch from the widest part at the pivot end. (See photos.)

Next I sanded the surfaces of the legs and after the glue cured. Then assembled to have the first view of the somewhat completed tripod - With a Majestic Gear-Head attached.





At first - because of the low quality of the wood - *(i.e. insect boreholes and knots of the wood*) - I was going to paint the legs red and the top camera mounting black. Now - I think that I will just stain and use polyurethane to finish, like I usually do.

So that is it - This was one of the shortest articles I have written. I hope that others may get their own ideas from making the rather easy DIY tripod.

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